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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/777,893

DATE: 09/01/2004

TIME: 16:11:30

Input Set : A:\CST-201 CIP.ST25.txt

Output Set: N:\CRF4\09012004\J777893.raw

3 <110> APPLICANT: Cell Signaling Technology, Inc.
 4 RUSH, John
 5 ZHANG, Hui
 6 ZHA, Xiangming
 7 COMB, Michael J.
 8 TAN, Yi

10 <120> TITLE OF INVENTION: IMMUNOAFFINITY ISOLATION OF MODIFIED PEPTIDES FROM COMPLEX MIXTURES

12 <130> FILE REFERENCE: CST-201 CIP
 14 <140> CURRENT APPLICATION NUMBER: 10/777,893
 15 <141> CURRENT FILING DATE: 2004-02-12
 17 <150> PRIOR APPLICATION NUMBER: US 09/148,712
 18 <151> PRIOR FILING DATE: 1998-09-04
 20 <150> PRIOR APPLICATION NUMBER: US 10/175,486
 21 <151> PRIOR FILING DATE: 2002-06-19
 23 <150> PRIOR APPLICATION NUMBER: US 09/535,364
 24 <151> PRIOR FILING DATE: 2000-03-24
 26 <150> PRIOR APPLICATION NUMBER: US 60/299,893
 27 <151> PRIOR FILING DATE: 2001-06-21
 29 <150> PRIOR APPLICATION NUMBER: US 60/337,012
 30 <151> PRIOR FILING DATE: 2001-11-08
 32 <160> NUMBER OF SEQ ID NOS: 163
 34 <170> SOFTWARE: PatentIn version 3.1
 36 <210> SEQ ID NO: 1
 37 <211> LENGTH: 19
 38 <212> TYPE: PRT
 39 <213> ORGANISM: Artificial Sequence
 41 <220> FEATURE:
 42 <223> OTHER INFORMATION: Synthetic Peptide
 44 <220> FEATURE:
 45 <221> NAME/KEY: MOD_RES
 46 <222> LOCATION: (10)..(10)
 47 <223> OTHER INFORMATION: PHOSPHORYLATION; tyrosine at position 10 is phosphorylated
 50 <400> SEQUENCE: 1
 52 Lys Ile Glu Lys Ile Gly Glu Gly Thr Tyr Gly Val Val Tyr Lys Gly
 53 1 5 10 15
 56 Arg His Lys
 60 <210> SEQ ID NO: 2
 61 <211> LENGTH: 19
 62 <212> TYPE: PRT
 63 <213> ORGANISM: Artificial Sequence
 65 <220> FEATURE:
 66 <223> OTHER INFORMATION: Synthetic Peptide
 68 <400> SEQUENCE: 2

ENTERED

7.6

RAW SEQUENCE LISTING

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71 1           5           10           15
74 Arg His Lys
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81 <213> ORGANISM: Artificial Sequence
83 <220> FEATURE:
84 <223> OTHER INFORMATION: Synthetic Peptide
86 <220> FEATURE:
87 <221> NAME/KEY: MOD_RES
88 <222> LOCATION: (8)..(8)
89 <223> OTHER INFORMATION: PHOSPHORYLATION; tyrosine at position 8 is phosphorylated
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94 Arg Leu Ile Glu Asp Asn Glu Tyr Thr Ala Arg Gln Gly Ala Lys Cys
95 1           5           10           15
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99 <211> LENGTH: 16
100 <212> TYPE: PRT
101 <213> ORGANISM: Artificial Sequence
103 <220> FEATURE:
104 <223> OTHER INFORMATION: Synthetic Peptide
106 <400> SEQUENCE: 4
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109 1           5           10           15
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113 <211> LENGTH: 12
114 <212> TYPE: PRT
115 <213> ORGANISM: Artificial Sequence
117 <220> FEATURE:
118 <223> OTHER INFORMATION: Synthetic Peptide
120 <220> FEATURE:
121 <221> NAME/KEY: MOD_RES
122 <222> LOCATION: (7)..(7)
123 <223> OTHER INFORMATION: PHOSPHORYLATION; tyrosine at position 7 is phosphorylated
126 <400> SEQUENCE: 5
128 Leu Gln Glu Arg Arg Lys Tyr Leu Lys His Arg Cys
129 1           5           10
132 <210> SEQ ID NO: 6
133 <211> LENGTH: 12
134 <212> TYPE: PRT
135 <213> ORGANISM: Artificial Sequence
137 <220> FEATURE:
138 <223> OTHER INFORMATION: Synthetic Peptide
140 <400> SEQUENCE: 6
142 Leu Gln Glu Arg Arg Lys Tyr Leu Lys His Arg Cys
143 1           5           10
146 <210> SEQ ID NO: 7
147 <211> LENGTH: 14

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148 <212> TYPE: PRT
149 <213> ORGANISM: Artificial Sequence
151 <220> FEATURE:
152 <223> OTHER INFORMATION: Synthetic Peptide
154 <220> FEATURE:
155 <221> NAME/KEY: MOD_RES
156 <222> LOCATION: (6)..(6)
157 <223> OTHER INFORMATION: PHOSPHORYLATION; tyrosine at position 6 is phosphorylated
160 <400> SEQUENCE: 7
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163 1          5          10
166 <210> SEQ ID NO: 8
167 <211> LENGTH: 14
168 <212> TYPE: PRT
169 <213> ORGANISM: Artificial Sequence
171 <220> FEATURE:
172 <223> OTHER INFORMATION: Synthetic Peptide
174 <400> SEQUENCE: 8
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177 1          5          10
180 <210> SEQ ID NO: 9
181 <211> LENGTH: 12
182 <212> TYPE: PRT
183 <213> ORGANISM: Artificial Sequence
185 <220> FEATURE:
186 <223> OTHER INFORMATION: Synthetic Peptide
188 <220> FEATURE:
189 <221> NAME/KEY: MOD_RES
190 <222> LOCATION: (7)..(7)
191 <223> OTHER INFORMATION: PHOSPHORYLATION; tyrosine at position 7 is phosphorylated
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197 1          5          10
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202 <212> TYPE: PRT
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208 <400> SEQUENCE: 10
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211 1          5          10
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215 <211> LENGTH: 15
216 <212> TYPE: PRT
217 <213> ORGANISM: Artificial Sequence
219 <220> FEATURE:
220 <223> OTHER INFORMATION: Synthetic Peptide
222 <220> FEATURE:

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223 <221> NAME/KEY: MOD_RES
224 <222> LOCATION: (8)..(8)
225 <223> OTHER INFORMATION: PHOSPHORYLATION; threonine at position 8 is phosphorylated
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231 1          5          10          15
234 <210> SEQ ID NO: 12
235 <211> LENGTH: 15
236 <212> TYPE: PRT
237 <213> ORGANISM: Artificial Sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: Synthetic Peptide
242 <400> SEQUENCE: 12
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245 1          5          10          15
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250 <212> TYPE: PRT
251 <213> ORGANISM: Artificial Sequence
253 <220> FEATURE:
254 <223> OTHER INFORMATION: Synthetic Peptide
256 <220> FEATURE:
257 <221> NAME/KEY: MOD_RES
258 <222> LOCATION: (13)..(13)
259 <223> OTHER INFORMATION: PHOSPHORYLATION; threonine at position 13 is phosphorylated
262 <400> SEQUENCE: 13
264 Cys Lys Glu Gly Leu Gly Pro Gly Asp Thr Thr Ser Thr Phe
265 1          5          10
268 <210> SEQ ID NO: 14
269 <211> LENGTH: 14
270 <212> TYPE: PRT
271 <213> ORGANISM: Artificial Sequence
273 <220> FEATURE:
274 <223> OTHER INFORMATION: Synthetic Peptide
276 <400> SEQUENCE: 14
278 Cys Lys Glu Gly Leu Gly Pro Gly Asp Thr Thr Ser Thr Phe
279 1          5          10
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283 <211> LENGTH: 6
284 <212> TYPE: PRT
285 <213> ORGANISM: Homo sapiens
287 <220> FEATURE:
288 <221> NAME/KEY: MISC_FEATURE
289 <222> LOCATION: (1)..(6)
290 <223> OTHER INFORMATION: At positions 1 and 3, X = K or R; at positions 2 and 4-5, X
= any
291      amino acid; at position 6, X = phosphothreonine or phosphoserine
294 <400> SEQUENCE: 15
W--> 296 Xaa Xaa Xaa Xaa Xaa Xaa
297 1          5

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300 <210> SEQ ID NO: 16
301 <211> LENGTH: 17
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303 <213> ORGANISM: Artificial Sequence
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306 <223> OTHER INFORMATION: Synthetic Peptide
308 <220> FEATURE:
309 <221> NAME/KEY: MOD_RES
310 <222> LOCATION: (9)..(9)
311 <223> OTHER INFORMATION: PHOSPHORYLATION; serine at position 9 is phosphorylated
314 <400> SEQUENCE: 16
316 Cys Ser Pro Arg Arg Arg Ala Ala Ser Met Asp Asn Asn Ser Lys Phe
317 1           5           10           15
320 Ala
324 <210> SEQ ID NO: 17
325 <211> LENGTH: 17
326 <212> TYPE: PRT
327 <213> ORGANISM: Artificial Sequence
329 <220> FEATURE:
330 <223> OTHER INFORMATION: Synthetic Peptide
332 <400> SEQUENCE: 17
334 Cys Ser Pro Arg Arg Arg Ala Ala Ser Met Asp Asn Asn Ser Lys Phe
335 1           5           10           15
338 Ala
342 <210> SEQ ID NO: 18
343 <211> LENGTH: 15
344 <212> TYPE: PRT
345 <213> ORGANISM: Artificial Sequence
347 <220> FEATURE:
348 <223> OTHER INFORMATION: Synthetic Peptide
350 <220> FEATURE:
351 <221> NAME/KEY: MOD_RES
352 <222> LOCATION: (8)..(8)
353 <223> OTHER INFORMATION: PHOSPHORYLATION; threonine at position 8 is phosphorylated
356 <400> SEQUENCE: 18
358 Cys Leu Lys Asp Arg Gln Gly Thr His Lys Asp Ala Glu Ile Leu
359 1           5           10           15
362 <210> SEQ ID NO: 19
363 <211> LENGTH: 14
364 <212> TYPE: PRT
365 <213> ORGANISM: Artificial Sequence
367 <220> FEATURE:
368 <223> OTHER INFORMATION: Synthetic Peptide
370 <220> FEATURE:
371 <221> NAME/KEY: MOD_RES
372 <222> LOCATION: (7)..(7)
373 <223> OTHER INFORMATION: PHOSPHORYLATION; threonine at position 7 is phosphorylated
376 <400> SEQUENCE: 19
378 Ser Arg Pro Arg Ser Cys Thr Trp Pro Leu Pro Arg Glu Ile

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RAW SEQUENCE LISTING ERROR SUMMARY
 PATENT APPLICATION: US/10/777,893

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Input Set : A:\CST-201 CIP.ST25.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:15; Xaa Pos. 1,2,3,4,5,6
 Seq#:24; Xaa Pos. 1,2,3,5
 Seq#:38; Xaa Pos. 1,2,3,4,5,6
 Seq#:39; Xaa Pos. 1,2,4,5
 Seq#:40; Xaa Pos. 3,4,5
 Seq#:42; Xaa Pos. 2,3,5,6

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/777,893

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Input Set : A:\CST-201 CIP.ST25.txt

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L:296 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:464 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
L:721 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0
L:745 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0
L:769 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0
L:809 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0